

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP) RENEWAL  
INDIANA DEPARTMENT OF ENVIRONMENTAL  
MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES**

**IR Von Duprin  
2720 Tobey Drive  
Indianapolis, Indiana 46219**

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

|   |                            |
|---|----------------------------|
| Operation Permit No.: F097-16154-00050                            |                            |
| Issued by:  | Issuance Date: 9-22-2003   |
| Originally signed by John B. Chavez                               | Expiration Date: 9-22-2008 |
| John B. Chavez, Administrator<br>Office of Environmental Services |                            |

## **SECTION A SOURCE SUMMARY**

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

## **SECTION B GENERAL CONDITIONS**

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-4(5)(E)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
- B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.12 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
- B.13 Emergency Provisions [326 IAC 2-8-12]
- B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
- B.16 Permit Renewal [326 IAC 2-8-3(h)]
- B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]
- B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]
- B.19 Permit Revision Requirement [326 IAC 2-8-11.1]
- B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-30-3-1]
- B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]
- B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]

## **SECTION C SOURCE OPERATION CONDITIONS**

### **Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
- C.2 Overall Source Limit [326 IAC 2-8]
- C.3 Opacity [326 IAC 5-1]
- C.4 Open Burning [326 IAC 4-1][IC 13-17-9]
- C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.6 Fugitive Dust Emissions [326 IAC 6-4]
- C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

### **Testing Requirements [326 IAC 2-8-4(3)]**

- C.9 Performance Testing [326 IAC 3-6]

### **Compliance Requirements [326 IAC 2-1.1-11]**

- C.10 Compliance Requirements [326 IAC 2-1.1-11]

### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]**

- C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]
- C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

- C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
- C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]
- C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

**Stratospheric Ozone Protection**

- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

**SECTION D.1 FACILITY OPERATION CONDITIONS**

**One Surface Coating Operation (SL-01)**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.1.1 Hazardous Air Pollutants (HAPs) [326 IAC 2-8]
- D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.3 Particulate-Matter (PM) [40 CFR 52 Subpart P]
- D.1.4 Particulate [326 IAC 6-3-2(d)]
- D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

**Compliance Determination Requirements**

- D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- D.1.7 Monitoring

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

- D.1.8 Record Keeping Requirements
- D.1.9 Reporting Requirements

**SECTION D.2 FACILITY OPERATION CONDITIONS**

**Decorative Chromium Electroplating Operation (SHL-5 and DHL-13)**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.2.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]
- D.2.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]
- D.2.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]
- D.2.4 Work Practice Standards [40 CFR 63.342(f)]
- D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]
- D.2.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

**Compliance Determination Requirements**

- D.2.7 Performance Testing [326 IAC 2-1.1-11] [326 IAC 2-8-5(a)(1)&(4)] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- D.2.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-8-6(1)] [326 IAC 2-8-5(1)] [40 CFR 63.343(c)]

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

- D.2.9 Record Keeping Requirements [326 IAC 2-8-5(3)] [40 CFR 63.346]

D.2.10 Reporting Requirements [326 IAC 2-8-5(3)] [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347]

### **SECTION D.3 FACILITY OPERATION CONDITIONS**

#### **One Polishing Station (PU-6B)**

##### **Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.3.1 Particulate [326 IAC 6-3-2]

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

##### **Compliance Determination Requirements**

D.3.3 Particulate Control

##### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

##### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

### **SECTION D.4 FACILITY OPERATION CONDITIONS - Insignificant Activities**

##### **Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.4.1 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

D.4.3 Particulate [326 IAC 6-3-2]

D.4.4 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

##### **Compliance Determination Requirements**

D.4.5 Particulate Control

##### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

##### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

**Certification Form**

**Emergency Occurrence Form**

**Quarterly Report Form**

**NESHAP Ongoing Compliance Report**

**Quarterly Deviation and Compliance Monitoring Report Form**

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) the City of Indianapolis, Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary source relating to the operation of surface coating of miscellaneous metal parts with powders, decorative chromium electroplating and metal trimming and stamping of architectural hardware products.

|                         |  |
|-------------------------|--|
| Authorized Individual:  | Environmental Manager  |
| Source Address:         | 2720 Tobey Drive, Indianapolis, Indiana 46219  |
| Mailing Address:        | 2720 Tobey Drive, Indianapolis, Indiana 46219  |
| General Source Phone:   | (317) 613 8944   |
| SIC Code:               | 3442, 3446, 3469, 3471 and 3479  |
| County Location:        | Marion   |
| Source Location Status: | Attainment for all criteria pollutants   |
| Source Status:          | Federally Enforceable State Operating Permit (FESOP)<br>Minor Source, under PSD Rules;<br>Minor Source, Section 112 of the Clean Air Act |

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) F-Systems custom built solid lubricant application booth, identified as Emission Unit ID SL-01, for surface coating of miscellaneous metal parts with maximum coating capacity of 4.69 gallons of coating per hour, equipped with dry filters for particulate emissions control and exhausting through Stack ID SV25. There is also one (1) associated natural gas fired curing oven with heat input rate of 2.0 million Btu per hour (both constructed in 1998).
- (b) One (1) Single Hoist Line decorative chromium electroplating line, identified as ID SHL-5, constructed in 1986, and consisting of:
  - one (1) chromium electroplating tank, identified as Tank # 20, controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter at any time during operation of the tank. Additionally, tank # 20 emissions are directed to a packed bed scrubber at 4300 actual cubic feet per minute and exhausting through stack ID 5.
- (c) One (1) Dual Hoist Line decorative chromium electroplating line, identified as ID DHL-13, constructed in 1986, and consisting of:
  - one (1) chromium electroplating tank, identified as Tank # 58, controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter at any time during operation of the tank. Additionally, tank # 58 emissions are directed to a packed bed scrubber at 4300 actual cubic feet per minute and exhausting through stack ID 16.

- (d) One (1) polishing station, identified as PU-6B, consisting of twenty eight (28) Hand Polisher Work Station Units for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift per work station unit, with each unit weighing approximately 0.524 pounds, and using cartridge dust collector for particulate control identified as Stack ID 6B and exhausting inside the building. This polishing station was installed in 1986.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with heat input equal to or less than 10 million British thermal units (Btu) per hour consisting of:
  - (1) Orr and Sembower natural gas fired boiler, identified as ID CU-1, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
  - (2) Dunham Bush natural gas fired boiler, identified as ID CU-2, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
  - (3) One (1) natural gas fired cogeneration unit (generator/water heater), with a maximum heat input rate of 0.95 million Btu per hour (constructed in 2003).
  - (4) One natural gas fired 75 kW microturbine, with a maximum heat input rate of 0.95 million Btu per hour (constructed in 2003).
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (c) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (d) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (e) Cleaners and solvents usage, of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months and characterized as follows:
  - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100F); or
  - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 degrees C (68F).
- (f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (g) Closed loop heating and cooling system.
- (h) Infrared cure equipment.
- (i) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

- (l) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (m) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (n) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.
- (o) On site fire and emergency response training approved by the department.
- (p) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (q) A laboratory as defined in 326 IAC 2-7-1(20)(C).
- (r) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour particulates and NOx, less than 25 pounds per day CO, or less than 3 pounds per hour VOC).
  - (1) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-6A, using cartridge dust collector for particulate control identified as Stack ID 6A and exhausting inside the building. This unit consists of:
    - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 240 units per eight hour shift per polishing unit, with each unit weighing approximately 0.524 pounds. Five (5) of the polishing units were installed in 1986 and one (1) remaining unit, at an exemption level, was installed in 1998.
    - (ii) One (1) Hand Polisher Work Station Unit for the correction of robotic polishing defects at a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.524 pounds. This unit was installed in 2002.
  - (2) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-8, using cartridge dust collector for particulate control identified as Stack ID 8 and exhausting inside the building. This unit consists of:
    - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 240 units per eight hour shift per polishing unit, with each unit weighing approximately 0.524 pounds. Four (4) of the polishing units were installed in 1986 and two (2) remaining units, at an exemption level, were installed in 1998.
    - (ii) One (1) Buffing Unit with a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.524 pounds. This unit was installed in 1986.
  - (3) One (1) Robotic Polishing Unit identified as ID PU-1 for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.309 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 1A and exhaust inside the building.

- (4) One (1) Robotic Polishing Unit identified as ID PU-3 for polishing miscellaneous metal parts at a maximum capacity of 200 units per eight hour shift with each unit weighing approximately 1.749 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 3 and exhaust inside the building.
- (5) One (1) Robotic Polishing Unit identified as ID PU-4 for polishing miscellaneous metal parts at a maximum capacity of 220 units per eight hour shift with each unit weighing approximately 0.95 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 4 and exhaust inside the building.
- (6) One (1) 500 gallon liquid caustic compound removal tank and one (1) 500 gallon de-ionized water rinse tank to facilitate the removal of powder coat paint (non VOC).
- (7) Kolene Molten Salt Paint Stripping Bath for stripping paint racks, identified as ID CU-9. This unit is also equipped with natural gas fired burner system with maximum heat input rate of 1.8 million Btu per hour.
- (8) Powder coating operation for coating miscellaneous metal parts, consisting of three (3) spray booths, identified as PB-1, PB-2 and PB-3, with a total maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by a dust collector exhausting inside the building. This operation is also equipped with one (1) natural gas fired dry off oven identified as ID CU-10 with a maximum heat input rate of 1.0 million Btu per hour and exhausting through stack ID 22; and two (2) powder coating natural gas fired cure ovens identified as ID CU-11 and CU-12 each with a maximum heat input rate of 2.5 million Btu per hour and each exhausting through stacks ID 23 and 24, respectively.
- (9) Mullion powder coating of miscellaneous metal parts in one (1) powder coating spray booth identified as ID PB-14 with a maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by cartridge dust collector and exhausting through stack ID PB-14. This operation is also equipped with one (1) natural gas fired cure oven identified as ID CU-7 with a maximum heat input rate of 0.8 million Btu per hour and exhausting through stack ID 14.

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the OES to renew a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.



## **SECTION B                      GENERAL CONDITIONS**

### **B.1        Permit No Defense [IC 13]**

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

### **B.2        Definitions [326 IAC 2-8-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

### **B.3        Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]**

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### **B.4        Enforceability [326 IAC 2-8-6]**

- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the OES.

### **B.5        Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]**

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

### **B.6        Severability [326 IAC 2-8-4(4)]**

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.7        Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

This permit does not convey any property rights of any sort, or any exclusive privilege.

### **B.8        Duty to Supplement and Provide Information [326 IAC 2-8-4(5)(E)]**

- (a) The Permittee shall furnish to IDEM, OAQ, and the OES within a reasonable time, any information that IDEM, OAQ, and the OES may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and the OES copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]**

---

IDEM, OAQ, and the OES may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

**B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]**

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

**B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

---

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the OES on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

- (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, and the OES may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]**

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and the OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and the OES. IDEM, OAQ, and the OES, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.13 Emergency Provisions [326 IAC 2-8-12]**

---

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and the OES, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

City of Indianapolis OES  
Telephone No.: 317 327-2234  
Facsimile No.: 317 327-2274

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) IDEM, OAQ and the OES, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ and the OES, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

---

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or the OES determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ or the OES, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or the OES, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or the OES, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.16 Permit Renewal** [326 IAC 2-8-3(h)]

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and the OES and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

- (1) A timely renewal application is one that is:
  - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the OES on or before the date it is due.
- (2) If IDEM, OAQ and the OES upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ and the OES takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and the OES, any additional information identified as needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097  
  
Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

**B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]**

---

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and the OES, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) **Emission Trades [326 IAC 2-8-15(c)]**  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).



- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

**B.19 Permit Revision Requirement [326 IAC 2-8-11.1]**

---

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

**B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-30-3-1]**

---

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, the OES, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]**

---

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

## SECTION C SOURCE OPERATION CONDITIONS

|               |
|---------------|
| Entire Source |
|---------------|

### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

**C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]**

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

**C.6 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

**C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]**

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Demolition and renovation  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

#### **Testing Requirements [326 IAC 2-8-4(3)]**

##### **C.9 Performance Testing [326 IAC 3-6]**

---

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and the OES, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and the OES, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

##### **C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

---

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

##### **C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

##### **C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

- 
- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
  - (b) Whenever a condition in this permit requires the measurement of a surface tension, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
  - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

If a regulated substance as defined in is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

**C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-8-4] [326 IAC 2-8-5]**

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ, and the OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan to include such response steps taken.

The OMM Plan or Parametric Monitoring and SMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; or
- (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall be considered a deviation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]  
[326 IAC 2-8-5]

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).



**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]**

---

- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

The emission statement does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the OES on or before the date it is due.

**C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

---

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the OES within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

---

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the OES on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

### **Stratospheric Ozone Protection**

#### **C.20 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) F-Systems custom built solid lubricant application booth, identified as Emission Unit ID SL-01, for surface coating of miscellaneous metal parts with maximum coating capacity of 4.69 gallons of coating per hour, equipped with dry filters for particulate emissions control and exhausting through Stack ID SV25. There is also one (1) associated natural gas fired curing oven with heat input rate of 2.0 million Btu per hour (both constructed in 1998).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Hazardous Air Pollutants (HAPs) [326 IAC 2-8]

The Permittee shall comply as follows:

- (a) The total usage of any single hazardous air pollutant (HAP) at F-Systems custom built solid lubricant application booth (SL-01), including HAP usage for clean-up, shall be less than 9.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.
- (b) The total usage of the combined HAPs at F-Systems custom built solid lubricant application booth (SL-01), including combined HAP usage for clean-up, shall be less than 24 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this condition shall limit the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

The actual VOC emissions from the F-Systems custom built solid lubricant application booth (ID SL-01) shall be limited to less than fifteen (15) pounds per day. Therefore, rule 326 IAC 8-2-9 is not applicable to the F-Systems custom built solid lubricant application booth (ID SL-01).

#### D.1.3 Particulate-Matter (PM) [40 CFR 52 Subpart P]

Pursuant to 40 CFR 52 Subpart P, the PM from the F-Systems custom built solid lubricant application booth (SL-01) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.4 Particulate [326 IAC 6-3-2(d)]

Pursuant to and 326 IAC 6-3-2(d), particulate from the F-Systems custom built solid lubricant application booth (SL-01), shall be controlled by a dry filter, and the Permittee shall operate the dry filters in accordance with manufacturer's specifications.

**D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the spray paint facility and its control devices.

**Compliance Determination Requirements**

**D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]**

Compliance with the VOC usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4. Compliance with HAP limitations will also limit VOC emissions.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**D.1.7 Monitoring**

- (a) Once per shift inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (SV25) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

**D.1.8 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly unless otherwise noted, and shall be complete and sufficient to establish compliance with the VOC/HAP usage limits and/or the VOC/HAP emission limits established in Condition D.1.1 and D.1.2 .
  - (1) The VOC and HAP content of each coating material and solvent used.
  - (2) The amount of coating material and solvent less water used on monthly basis.
    - (i) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (ii) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
  - (3) The cleanup solvent usage for each day;

- (4) The total VOC and HAP usage for each day;
  - (5) The total HAPs usage for each month; and
  - (6) The weight of VOCs and HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, once per shift and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (b) One (1) Single Hoist Line decorative chromium electroplating line, identified as ID SHL-5, constructed in 1986, and consisting of:  
  
one (1) chromium electroplating tank, identified as Tank # 20, controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter at any time during operation of the tank. Additionally, tank # 20 emissions are directed to a packed bed scrubber at 4300 actual cubic feet per minute and exhausting through stack ID 5.
- (c) One (1) Dual Hoist Line decorative chromium electroplating line, identified as ID DHL-13, constructed in 1986, and consisting of:  
  
one (1) chromium electroplating tank, identified as Tank # 58, controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter at any time during operation of the tank. Additionally, tank # 58 emissions are directed to a packed bed scrubber at 4300 actual cubic feet per minute and exhausting through stack ID 16.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-5(1)]

#### D.2.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N.

#### D.2.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]

The provisions of 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to tanks #20 and #58.

#### D.2.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.
- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from tanks #20 and #58 by:
  - (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed one-hundredth milligrams of total chromium per dry standard cubic meter of ventilation air (0.01 mg/dscm) [equivalent to four and four-tenths times ten raised to the power of negative six grains of total chromium per dry standard cubic foot of ventilation air ( $4.4 \times 10^{-6}$  gr/dscf)]; or

- (2) Not allowing the surface tension of the electroplating bath contained within the tank to exceed forty-five dynes per centimeter (45 dynes/cm) [equivalent to three and one-tenth times ten raised to the power of negative three pound-force per foot ( $3.1 \times 10^{-3}$  lb<sub>f</sub>/ft)] at any time during operation of tanks #20 and #58 when a chemical fume suppressant containing a wetting agent is used.

#### D.2.4 Work Practice Standards [40 CFR 63.342(f)]

---

The following work practice standards apply to tanks #20 and #58:

- (a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain tanks #20 and #58, including the chemical wetting agent, the packed bed scrubber and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.2.6.
- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.2.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
- (d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, and OES, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.
- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAQ, or OES may require that the Permittee make changes to the OMP required by Condition D.2.6. Revisions may be required if IDEM, OAQ, or OES, finds that the plan:
  - (1) Does not address a malfunction or period of excess emissions that has occurred;
  - (2) Fails to provide for the operation of tanks #20 and #58, the chemical wetting agent, or the packed bed scrubber and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or
  - (1) Does not provide adequate procedures for correcting malfunctioning process equipment, chemical wetting agent, monitoring equipment or other causes of excess emissions as quickly as practicable.

The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.

#### D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

---

A Preventive Maintenance Plan (PMP), in accordance with Section B-Preventive Maintenance Plan, of this permit, is required for tanks #20 and #58 and the chemical wetting agent.

#### D.2.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

---

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of tanks #20 and #58. The OMP shall specify the operation and maintenance criteria for tanks #20 and #58, the chemical wetting agent, the packed bed scrubber if being used and monitoring equipment shall include the following elements:

- (1) For the packed-bed scrubber (PBS):
    - (A) Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
    - (B) Quarterly visual inspection of the back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist.
    - (C) Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.
    - (D) Add fresh makeup water to the top of the packed bed if greater than 50% of the scrubber water is drained.
  - (2) Manufacturers recommendations for maintenance of the monitoring equipment used to measure surface tension.
  - (3) A standardized checklist to document the operation and maintenance criteria for tanks #20 and #58, the air pollution control device, the add-on air pollution control device and the monitoring equipment.
  - (4) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.
  - (5) A systematic procedure for identifying malfunctions and periods of excess emissions of tanks #20 and #58, the air pollution control device, the add-on air pollution control device and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.2.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.2.6(a).
  - (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining tanks #20 and #58, the air pollution control device, the add-on air pollution control device and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.
  - (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ and OES.



- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ, and OES, for the life of tanks #20 and #58 or until the tank is no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAQ, and OES, for a period of five (5) years after each revision to the plan.

#### **Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-8-5(a)(1)&(4)]**

##### **D.2.7 Performance Testing [326 IAC 2-1.1-11] [326 IAC 2-8-5(a)(1)&(4)] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]**

- 
- (a) A performance test demonstrating initial compliance for tanks #20 and # 58 was performed on January 30, 1996.

During the initial performance test conducted on January 30, 1996, it was determined that the total chromium concentration of each stack ID # 5 and 16, using Method 306, Appendix A of 40 CFR 63, was 0.0022 mg/dscm.

- (b) The Permittee is not required to further test tanks #20 and #58 by this permit. However, the IDEM may require testing when necessary to determine if the tanks are in compliance. If testing is required by the IDEM, or OES, compliance with the limit specified in Condition D.2.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.
- (c) Any change, modification, or reconstruction of tanks #20 and #58, the chemical wetting agent, the packed bed scrubber or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.

#### **Compliance Monitoring Requirements [326 IAC 2-8-6(1)] [326 IAC 2-8-5(1)]**

##### **D.2.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-8-6(1)] [326 IAC 2-8-5(1)] [40 CFR 63.343(c)]**

- 
- (a) Pursuant to 40 CFR 63.343(c)(5)(ii) and (iii), when using a wetting agent in the electroplating bath to comply with the limit specified in Condition D.2.3, the Permittee shall monitor the surface tension of the electroplating baths. Operation of tanks #20 and # 58 at a surface tension greater than 45 dynes per centimeter shall constitute noncompliance with the standards.
    - (1) The surface tension of each chromium electroplating tank in operation shall be monitored once every four (4) hours for the first forty (40) hours of tank operation with a stalagmometer or a tensionmeter pursuant to 40 CFR Part 63 Appendix A Method 306B (Surface Tension Measurement and Record Keeping for Chromium Plating Tanks Used at Electroplating and Anodizing Facilities).
    - (2) The time between monitoring can be increased if there have been no exceedances. Once there are no exceedances in forty (40) hours of tank operation, the surface tension measurement may be conducted once every eight (8) hours of tank operation. Once there are no exceedances during forty (40) hours of tank operation, surface tension measurement may be conducted once every forty (40) hours of tank operation on an ongoing basis or on an alternative monitoring schedule approved by IDEM, OAQ and OES, until an exceedance occurs.

The source, in accordance with 40 CFR Part 63, Subpart N, agrees to conduct surface tension measurements, at a minimum, once each day of operation provided there are no more than forty (40) hours of tank operation between successive surface tension measurements.

- (3) Once an exceedance occurs through tank surface tension measurement, wetting agent shall be added and the original monitoring schedule of once every four (4) hours must be resumed. A subsequent decrease in frequency of monitoring surface tension is allowed as stated in paragraph (2) above.
  - (4) Once a tank or bath solution is drained and a new solution is added, the original surface tension monitoring schedule of once every four (4) hours must be resumed with a subsequent decrease in monitoring frequency allowed as stated in paragraph (2) above.
- (b) Tank operation or operating time is defined as that time when a part is in the tank and there is a current running through the tank. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts is considered operating time.

#### **Record Keeping and Reporting Requirements [326 IAC 2-8-5(3)] [326 IAC 2-8-19]**

##### **D.2.9 Record Keeping Requirements [326 IAC 2-8-5(3)] [40 CFR 63.346]**

The Permittee shall maintain records to document compliance with Conditions D.2.3, D.2.4 and D.2.6 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the chemical wetting agent, the packed bed scrubber system whenever being used, and monitoring equipment to document that the inspection and maintenance required by Conditions D.2.7 and D.2.8 have taken place. The record can take the form of a checklist and should identify the following:
  - (1) The device inspected;
  - (2) The date of inspection;
  - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
  - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks #20 and #58, the packed bed scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tanks #20 and #58, the packed bed scrubber and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks #20 and #58, the packed bed scrubber and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.

- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.2.8(b), of each tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressants added.
- (l) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.2.10.

**D.2.10 Reporting Requirements [326 IAC 2-8-5(3)] [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347]**

The notifications and reports required in this section shall be submitted to IDEM, OAQ, and OES, using the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
    - (A) The NCS shall be submitted to IDEM, OAQ, and OES, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
    - (B) The NCS for tanks #20 and #58 was submitted to IDEM, OAQ and OES.
  - (2) Notification of Construction or Reconstruction  
Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ, and OES. In addition, the Permittee may not change, modify, or reconstruct tanks #20 and #58 without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ, and OES.
    - (A) The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).
    - (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device [i.e., the addition of duct work to the control equipment system].
    - (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks #20 and #58 serves as this notification.

- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ, and OES, before construction, modification, or reconstruction may commence.

(b) Performance Test Results

The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report

The Permittee shall prepare summary reports to document the ongoing compliance status of tanks #20 and #58 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because tanks #20 and #58 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAQ, and OES, upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).

(A) The first report shall cover the period from the issuance date of this permit to December 31 of the year in which the permit is issued.

(B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.

- (2) If both of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAQ, and OES:

(A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.2.8(b) for the reporting period; and

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.2.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

- (3) IDEM, OAQ, or OES, may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

## SECTION D.3

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (d) One (1) polishing station, identified as PU-6B, consisting of twenty eight (28) Hand Polisher Work Station Units for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift per work station unit, with each unit weighing approximately 0.524 pounds, and using cartridge dust collector for particulate control identified as Stack ID 6B and exhausting inside the building. This polishing station was installed in 1986.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies), the allowable particulate emission rate from the Hand Polisher Work Station (PU-6B) shall not exceed 1.49 pounds per hour when operating at a process weight rate of 440.16 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

#### D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

### Compliance Determination Requirements

#### D.3.3 Particulate Control

In order to comply with Condition D.3.1, the cartridge dust collector for PM and PM10 control shall be in operation at all times that the Hand Polisher Work Station (PU-6B) is in operation.

### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

There are no Compliance Monitoring Requirements applicable to these emission units.

### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

There are no Record Keeping and Reporting Requirements applicable to these emission units.

## SECTION D.4 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

#### Insignificant Activities

- (a) Natural gas fired combustion sources with heat input equal to or less than 10 million British thermal units (Btu) per hour consisting of:
  - (1) Orr and Sembower natural gas fired boiler, identified as ID CU-1, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
  - (2) Dunham Bush natural gas fired boiler, identified as ID CU-2, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour particulates and NOx, less than 25 pounds per day CO, or less than 3 pounds per hour VOC).
  - (1) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-6A, using cartridge dust collector for particulate control identified as Stack ID 6A and exhausting inside the building. This unit consists of:
    - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 240 units per eight hour shift per polishing unit, with each unit weighing approximately 0.524 pounds. Five (5) of the polishing units were installed in 1986 and one (1) remaining unit, at an exemption level, was installed in 1998.
    - (ii) One (1) Hand Polisher Work Station Unit for the correction of robotic polishing defects at a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.524 pounds. This unit was installed in 2002.
  - (2) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-8, using cartridge dust collector for particulate control identified as Stack ID 8 and exhausting inside the building. This unit consists of:
    - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 240 units per eight hour shift per polishing unit, with each unit weighing approximately 0.524 pounds. Four (4) of the polishing units were installed in 1986 and two (2) remaining units, at an exemption level, were installed in 1998.
    - (ii) One (1) Buffing Unit with a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.524 pounds. This unit was installed in 1986.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Facility Description [326 IAC 2-8-4(10)]:**

**Insignificant Activities**

- (3) One (1) Robotic Polishing Unit identified as ID PU-1 for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.309 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 1A and exhaust inside the building.
- (4) One (1) Robotic Polishing Unit identified as ID PU-3 for polishing miscellaneous metal parts at a maximum capacity of 200 units per eight hour shift with each unit weighing approximately 1.749 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 3 and exhaust inside the building.
- (5) One (1) Robotic Polishing Unit identified as ID PU-4 for polishing miscellaneous metal parts at a maximum capacity of 220 units per eight hour shift with each unit weighing approximately 0.95 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 4 and exhaust inside the building.
- (6) One (1) 500 gallon liquid caustic compound removal tank and one (1) 500 gallon de-ionized water rinse tank to facilitate the removal of powder coat paint (non VOC).
- (7) Kolene Molten Salt Paint Stripping Bath for stripping paint racks, identified as ID CU-9. This unit is also equipped with natural gas fired burner system with maximum heat input rate of 1.8 million Btu per hour.
- (8) Powder coating operation for coating miscellaneous metal parts, consisting of three (3) spray booths, identified as PB-1, PB-2 and PB-3, with a total maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by a dust collector exhausting inside the building. This operation is also equipped with one (1) natural gas fired dry off oven identified as ID CU-10 with a maximum heat input rate of 1.0 million Btu per hour and exhausting through stack ID 22; and two (2) powder coating natural gas fired cure ovens identified as ID CU-11 and CU-12 each with a maximum heat input rate of 2.5 million Btu per hour and each exhausting through stacks ID 23 and 24, respectively.
- (9) Mullion powder coating of miscellaneous metal parts in one (1) powder coating spray booth identified as ID PB-14 with a maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by cartridge dust collector and exhausting through stack ID PB-14. This operation is also equipped with one (1) natural gas fired cure oven identified as ID CU-7 with a maximum heat input rate of 0.8 million Btu per hour and exhausting through stack ID 14.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

**D.4.1 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4]**

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emitted from the two (2) natural gas fired boilers, constructed after 1983 (ID CU-1 and CU-2) shall be limited to 0.60 lbs of PM per MMBtu, calculated using the following equation:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input  
Q = total source maximum operation capacity rating = 10.0 MMBtu/hr

#### D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

---

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.4.3 Particulate [326 IAC 6-3-2]

---

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies), the allowable particulate emission rate from the polishing station identified as PU-8 shall not exceed 0.58 pounds per hour when operating at a process weight rate of 110.04 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

#### D.4.4 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

---

Pursuant to 326 IAC 6-3-2(e), the allowable particulate emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. This includes the following operations:

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (c) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-6A, using cartridge dust collector for particulate control identified as Stack ID 6A and exhausting inside the building. This unit consists of:
  - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 600 units per eight hour shift with each unit weighing approximately 0.13 pounds. Five (5) of the polishing units were installed in 1986 and one (1) remaining unit, at an exemption level, was installed in 1998.



- (ii) One (1) Hand Polisher Work Station Unit for the correction of robotic polishing defects at a maximum capacity of 250 units per eight hour shift with each unit weighing approximately 0.13 pounds. This unit was installed in 2002.
- (d) One (1) Robotic Polishing Unit identified as ID PU-1 for polishing miscellaneous metal parts at a maximum capacity of 576 units per eight hour shift with each unit weighing approximately 0.31 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 1A and exhaust inside the building.
- (e) One (1) Robotic Polishing Unit identified as ID PU-3 for polishing miscellaneous metal parts at a maximum capacity of 300 units per eight hour shift with each unit weighing approximately 0.31 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 3 and exhaust inside the building.
- (f) One (1) Robotic Polishing Unit identified as ID PU-4 for polishing miscellaneous metal parts at a maximum capacity of 220 units per eight hour shift with each unit weighing approximately 0.95 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 4 and exhaust inside the building.
- (g) Powder coating operation for coating miscellaneous metal parts, consisting of three (3) spray booths, identified as PB-1, PB-2 and PB-3, with a total maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by a dust collector exhausting inside the building. This operation is also equipped with one (1) natural gas fired dry off oven identified as ID CU-10 with a maximum heat input rate of 1.0 million Btu per hour and exhausting through stack ID 22; and two (2) powder coating natural gas fired cure ovens identified as ID CU-11 and CU-12 each with a maximum heat input rate of 2.5 million Btu per hour and each exhausting through stacks ID 23 and 24, respectively.
- (h) Mullion powder coating of miscellaneous metal parts in one (1) powder coating spray booth identified as ID PB-14 with a maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by cartridge dust collector and exhausting through stack ID PB-14. This operation is also equipped with one (1) natural gas fired cure oven identified as ID CU-7 with a maximum heat input rate of 0.8 million Btu per hour and exhausting through stack ID 14.

## **Compliance Determination Requirements**

### **D.4.5 Particulate Control**

In order to comply with Conditions D.4.3 and D.4.4, the cartridge dust collectors for polishing units PU-1, PU-4, PU-6A, PU-8 and PU-3 for PM and PM10 control shall be in operation at all times that the each polishing facility is in operation.

## **Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

There are no Compliance Monitoring Requirements applicable to these emission units.

## **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

There are no Record Keeping and Reporting Requirements applicable to these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: IR Von Duprin  
Source Address: 2720 Tobey Drive, Indianapolis, IN 46219  
Mailing Address: 2720 Tobey Drive, Indianapolis, IN 46219  
FESOP No.: 097-16154-00050

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES  
DATA COMPLIANCE**

**2700 South Belmont Avenue  
Indianapolis, Indiana 46221  
Phone: 317-327-2234  
Fax: 317-327-2274**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: IR Von Duprin  
Source Address: 2720 Tobey Drive, Indianapolis, IN 46219  
Mailing Address: 2720 Tobey Drive, Indianapolis, IN 46219  
FESOP No.: 097-16154-00050

**This form consists of 2 pages (Page 1 of 2)**

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)  
    CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
    CThe Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

|   |
|---|
| Date/Time Emergency started:  |
| Date/Time Emergency was corrected:  |
| Was the facility being properly operated at the time of the emergency?    Y    N<br>Describe:   |
| Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:   |
| Estimated amount of pollutant(s) emitted during emergency:  |
| Describe the steps taken to mitigate the problem:   |
| Describe the corrective actions/response steps taken:   |
| Describe the measures taken to minimize emissions:  |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES  
DATA COMPLIANCE**

**FESOP Quarterly Report**

Source Name: IR Von Duprin  
Source Address: 2720 Tobey Drive, Indianapolis, IN 46219  
Mailing Address: 2720 Tobey Drive, Indianapolis, IN 46219  
FESOP No.: 097-16154-00050  
Facility: F-Systems custom built solid lubricant application booth (SL-01)  
Parameter: VOC  
Limit: The total input usage of volatile organic compounds (VOC) at spray paint booth SL-01, including VOC usage for clean-up, shall be less than 15 pounds per day.

Month: \_\_\_\_\_ Year: \_\_\_\_\_

| Day |  |  |  | Day |  |  |  |
|-----|--|--|--|-----|--|--|--|
| 1   |  |  |  | 17  |  |  |  |
| 2   |  |  |  | 18  |  |  |  |
| 3   |  |  |  | 19  |  |  |  |
| 4   |  |  |  | 20  |  |  |  |
| 5   |  |  |  | 21  |  |  |  |
| 6   |  |  |  | 22  |  |  |  |
| 7   |  |  |  | 23  |  |  |  |
| 8   |  |  |  | 24  |  |  |  |
| 9   |  |  |  | 25  |  |  |  |
| 10  |  |  |  | 26  |  |  |  |
| 11  |  |  |  | 27  |  |  |  |
| 12  |  |  |  | 28  |  |  |  |
| 13  |  |  |  | 29  |  |  |  |
| 14  |  |  |  | 30  |  |  |  |
| 15  |  |  |  | 31  |  |  |  |
| 16  |  |  |  |     |  |  |  |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES  
DATA COMPLIANCE**

**FESOP Quarterly Report**

Source Name: IR Von Duprin  
Source Address: 2720 Tobey Drive, Indianapolis, IN 46219  
Mailing Address: 2720 Tobey Drive, Indianapolis, IN 46219  
FESOP No.: 097-16154-00050  
Facility: F-Systems custom built solid lubricant application booth (SL-01)  
Parameter: Single and Combined Hazardous Air Pollutants (HAPs)  
Limit: The total input usage of any single HAP, and total HAPs delivered to the applicators in the F-Systems custom built solid lubricant application booth (SL-01) and during clean-up shall be limited to less than 9.0 and 24.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively.

YEAR: \_\_\_\_\_

| Month   | Total Usage This Month (tons) |               | Total Usage Previous 11 Months (tons) |               | Total Usage 12 Months (tons) |               |
|---------|-------------------------------|---------------|---------------------------------------|---------------|------------------------------|---------------|
|         | Single HAP                    | Combined HAPs | Single HAP                            | Combined HAPs | Single HAP                   | Combined HAPs |
| Month 1 |                               |               |                                       |               |                              |               |
| Month 2 |                               |               |                                       |               |                              |               |
| Month 3 |                               |               |                                       |               |                              |               |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES  
DATA COMPLIANCE**

**FESOP CHROMIUM ELECTROPLATING AND ANODIZING NESHAP  
ONGOING COMPLIANCE STATUS REPORT**

Source Name: IR Von Duprin  
Source Address: 2720 Tobey Drive, Indianapolis, IN 46219  
Mailing Address: 2720 Tobey Drive, Indianapolis, IN 46219  
FESOP No.: 097-16154-00050  
Tank ID #: \_\_\_\_\_  
Type of process: Decorative  
Monitoring Parameter: Surface tension of the electroplating or anodizing bath  
Parameter Value: 45 dynes per centimeter  
Limits: Total chromium concentration may not exceed 0.01 mg/dscm

This form is to be used to report compliance for the Chromium Electroplating and Anodizing NESHAP only.  
The frequency for completing this report may be altered by IDEM, OAQ, Compliance Branch.

**Companies classified as a major source:**      ***Submit this report no later than 30 days after the end of the reporting period.***  
**Companies classified as an area source:**      ***Complete this report no later than 30 days after the end of the reporting period, and retain on site unless otherwise notified.***

This form consists of 2 pagesPage 1 of 2

|   |   |     |     |
|---|---|-----|-----|
| BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:   |   |     |     |
| TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:   |   |     |     |
| <b>MAJOR AND AREA SOURCES: CHECK ONE</b>  |   |     |     |
| <b>9</b>  | NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.  |     |     |
| <b>9</b>  | THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING). |     |     |
| <b>AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:</b><br>IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES. |   |     |     |
| JAN   | APR   | JUL | OCT |
| FEB   | MAY   | AUG | NOV |
| MAR   | JUN   | SEP | DEC |
| <b>HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:</b><br>LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.                                      |   |     |     |
| JAN   | APR   | JUL | OCT |
| FEB   | MAY   | AUG | NOV |
| MAR   | JUN   | SEP | DEC |

## CHROMIUM ELECTROPLATING AND ANODIZING NESHAP ONGOING COMPLIANCE STATUS REPORT

ATTACH A SEPARATE PAGE IF NEEDED

Page 2 of 2

IF THE OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWED, PROVIDE AN EXPLANATION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS TAKEN FOR THAT EVENT:

DESCRIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE THE LAST STATUS REPORT:

ADDITIONAL COMMENTS:

**ALL SOURCES: CHECK ONE**

- 9 I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.
- 9 THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES  
DATA COMPLIANCE**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: IR Von Duprin  
Source Address: 2720 Tobey Drive, Indianapolis, IN 46219  
Mailing Address: 2720 Tobey Drive, Indianapolis, IN 46219  
FESOP No.: 097-16154-00050

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

|  |                               |
|--|-------------------------------|
| <b>Permit Requirement</b> (specify permit condition #) |                               |
| <b>Date of Deviation:</b>                              | <b>Duration of Deviation:</b> |
| <b>Number of Deviations:</b>                           |                               |
| <b>Probable Cause of Deviation:</b>                    |                               |
| <b>Response Steps Taken:</b>                           |                               |

|  |                               |
|--|-------------------------------|
| <b>Permit Requirement</b> (specify permit condition #) |                               |
| <b>Date of Deviation:</b>                              | <b>Duration of Deviation:</b> |
| <b>Number of Deviations:</b>                           |                               |
| <b>Probable Cause of Deviation:</b>                    |                               |
| <b>Response Steps Taken:</b>                           |                               |

|  |                               |
|--|-------------------------------|
| <b>Permit Requirement</b> (specify permit condition #) |                               |
| <b>Date of Deviation:</b>                              | <b>Duration of Deviation:</b> |
| <b>Number of Deviations:</b>                           |                               |
| <b>Probable Cause of Deviation:</b>                    |                               |
| <b>Response Steps Taken:</b>                           |                               |

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Indianapolis  
Office of Environmental Services**

**Addendum to the  
Technical Support Document for a Federally Enforceable State Operating  
Permit (FESOP) Renewal**

**Source Name:** IR Von Duprin  
**Source Location:** 2720 Tobey Drive, Indianapolis, Indiana 46219  
**County:** Marion  
**SIC Code:** 3442, 3446, 3469, 3471 and 3479  
**Operation Permit No.:** F097-16154-00050  
**Permit Reviewer:** Adeel Yousuf / EVP

On July 16, 2003, the Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) had a notice published in The Indianapolis Star in Indianapolis, Indiana, stating that IR Von Duprin had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal relating to the operation of surface coating of miscellaneous metal parts, decorative chromium electroplating and metal trimming and stamping of architectural hardware products. The notice also stated that OAQ and OES proposed to issue a FESOP Renewal for this operation and provided information on how the public could review the proposed FESOP Renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP Renewal should be issued as proposed.

On August 28, 2003, Russel E. Eiler of IR Von Duprin submitted comments on the proposed FESOP renewal permit. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

**Comment 1**

IR Von Duprin would like to add four hand polisher workstations or units (two hand lathes) to Emission Unit ID PU-6B for polishing miscellaneous metal parts. IR Von Duprin is requesting a minor permit revision. The attached spreadsheet will show the proposed changes and the effects that the additional emission units will have on the operations. The additional equipment will increase the uncontrolled PM/PM10 by 0.42 pounds per hour and 1.84 tons per year.

IR Von Duprin would also like to add a 70 kW natural gas-fired microturbine with a heat rate (HHV) of 948,500 BTU per hour. We believe that this addition would be considered an insignificant activity.

## Response 1

Based on the emission calculations submitted by the source, the PM/PM10 emission increase from adding four (4) additional polishing units is equal to 0.42 pounds per hour or 1.84 tons per year (see page 3 of 3 of ATSD, Appendix A). This change to the Emission unit PU 6B qualifies as an insignificant modification. The particulate allowable limit under 326 IAC 6-3-2 would also change from 1.34 pounds per hour to a new value of 1.49 pounds per hour based on the revised process weight rate of 440.16 pounds per hour.

Addition of one (1) natural gas fired 75kW microturbine rated at heat input rate of 0.95 MMBtu/hr also qualifies as insignificant activity (see pages 1 & 2 of 3 of ATSD, Appendix A).

The natural gas fired microturbine is not subject to 40 CFR Part 60, Subpart GG requirements, because the heat input at peak load is less than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

The following revisions have been made to the Technical Support Document under the Unrestricted Potential Emissions and Potential to Emit sections (**bolded** language has been added, the language with a line through it has been deleted). The OAQ and OES prefer that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

## Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

| Pollutant       | Unrestricted Potential Emissions<br>(tons/yr) |
|-----------------|---|
| PM              | <del>80.38</del> <b>82.23</b>                 |
| PM-10           | <del>80.48</del> <b>82.35</b>                 |
| SO <sub>2</sub> | 0.10  |
| VOC             | <del>68.09</del> <b>68.11</b>                 |
| CO              | <del>7.20</del> <b>7.55</b>                   |
| NO <sub>x</sub> | <del>8.60</del> <b>9.02</b>                   |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

## Potential to Emit After Issuance

The source, issued a FESOP on June 23, 1998, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F097-6983-00050; issued on June 23, 1998).

| Process/emission unit  | Potential to Emit After Issuance<br>(tons/year) |                                 |                 |                                  |                                |                                |                               |
|--|---|---------------------------------|-----------------|----------------------------------|--------------------------------|--------------------------------|-------------------------------|
|  | PM  | PM-10                           | SO <sub>2</sub> | VOC                              | CO                             | NO <sub>x</sub>                | HAPs                          |
| F-Systems application booth (ID SL-01)                                   | 0.5   | 0.5                             | 0.00            | < 25.0 <sup>(1)</sup>            | 0.00                           | 0.00                           | 9.0 (single)<br>24.0 (total)  |
| Single Hoist Line (ID SHL-5)   | negl.   | negl.                           | 0.00            | 0.00                             | 0.00                           | 0.00                           | 3.87 E-04 (single)            |
| Dual Hoist Line (ID DHL-13)  | negl.   | negl.                           | 0.00            | 0.00                             | 0.00                           | 0.00                           | 3.87 E-04 (single)            |
| Significant Hand Polishing Operation (ID PU-6B)                          | <del>0.35</del><br><b>0.366</b>                 | <del>0.35</del><br><b>0.366</b> | 0.00            | 0.00                             | 0.00                           | 0.00                           | 0.00                          |
| Insignificant Robotic Polishing Units (PU-1, PU-3, PU-4, PU-6A and PU-8) | 0.33  | 0.33                            | 0.00            | 0.00                             | 0.00                           | 0.00                           | 0.00                          |
| Insignificant Activities <sup>(2)</sup>                                  | <del>0.24</del><br><b>0.25</b>                  | <del>0.74</del><br><b>0.77</b>  | 0.10            | <del>1.29</del><br><b>1.31</b>   | <del>7.20</del><br><b>7.55</b> | <del>8.60</del><br><b>9.02</b> | 0.35 (single)<br>0.50 (total) |
| Total PTE After Issuance   | <del>1.42</del><br><b>1.45</b>                  | <del>1.82</del><br><b>1.97</b>  | 0.10            | <del>26.29</del><br><b>26.31</b> | <del>7.20</del><br><b>7.55</b> | <del>8.60</del><br><b>9.02</b> | < 10 (single)<br>< 25 (total) |

Notes:

1) Reflects limited potential emissions from spray paint booth A3 to make the requirements of 326 IAC 8-1-6 (BACT) not applicable.

2) Insignificant activities consist of natural gas combustion units (**Microturbine**, CU-1, CU-2, CU-7, CU-9, CU-10, CU-11 and CU-12) and powder coating booths (PB-01, PB-02, PB-03 and PB-14).

Sections A. and D.3 have been revised as follows to incorporate the changes.

**A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]**

This stationary source consists of the following emission units and pollution control devices:

- (d) One (1) polishing station, identified as PU-6B, consisting of twenty ~~four~~ **eight (248)** Hand Polisher Work Station Units for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift per work station unit, with each unit weighing approximately 0.524 pounds, and using cartridge dust collector for particulate control identified as Stack ID 6B and exhausting inside the building. This polishing station was installed in 1986.

**A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]**

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with heat input equal to or less than 10 million British thermal units (Btu) per hour consisting of:
  - (1) Orr and Sembower natural gas fired boiler, identified as ID CU-1, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
  - (2) Dunham Bush natural gas fired boiler, identified as ID CU-2, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).

- (3) One (1) natural gas fired cogeneration unit (generator/water heater), with a maximum heat input rate of 0.95 million Btu per hour (constructed in 2003).
- (4) **One natural gas fired 75 kW microturbine, with a maximum heat input rate of 0.95 million Btu per hour (constructed in 2003).**

### SECTION D.3 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-8-4(10)]:

- (d) One (1) polishing station, identified as PU-6B, consisting of twenty ~~four~~ **eight (248)** Hand Polisher Work Station Units for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift per work station unit, with each unit weighing approximately 0.524 pounds, and using cartridge dust collector for particulate control identified as Stack ID 6B and exhausting inside the building. This polishing station was installed in 1986.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies), the allowable particulate emission rate from the Hand Polisher Work Station (PU-6B) shall not exceed ~~1.34~~ **1.49** pounds per hour when operating at a process weight rate of ~~377.3~~ **440.16** pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Indianapolis  
Office of Environmental Services**

**Technical Support Document (TSD) for a Federally Enforceable State  
Operating Permit (FESOP) Renewal**

**Source Background and Description**

**Source Name:** IR Von Duprin  
**Source Location:** 2720 Tobey Drive  
**County:** Marion  
**SIC Code:** 3442, 3446, 3469, 3471 and 3479  
**Operation Permit No.:** F097-16154-00050  
**Permit Reviewer:** Adeel Yousuf / EVP

The Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) have reviewed a FESOP renewal application from IR Von Duprin relating to the operation of surface coating of miscellaneous metal parts, decorative chromium electroplating and metal trimming and stamping of architectural hardware products. IR Von Duprin was issued FESOP 097-6983-00050 on June 23, 1998.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) F-Systems custom built solid lubricant application booth, identified as Emission Unit ID SL-01, for surface coating of miscellaneous metal parts with maximum coating capacity of 4.69 gallons of coating per hour, equipped with dry filters for particulate emissions control and exhausting through Stack ID SV25. There is also one (1) associated natural gas fired curing oven with heat input rate of 2.0 million Btu per hour (both constructed in 1998).
- (b) One (1) Single Hoist Line decorative chromium electroplating line, identified as ID SHL-5, constructed in 1986, and consisting of:
  - one (1) chromium electroplating tank, identified as Tank # 20, controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter at any time during operation of the tank. Additionally, tank # 20 emissions are directed to a packed bed scrubber at 4300 actual cubic feet per minute and exhausting through stack ID 5.
- (c) One (1) Dual Hoist Line decorative chromium electroplating line, identified as ID DHL-13, constructed in 1986, and consisting of:
  - one (1) chromium electroplating tank, identified as Tank # 58, controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter

at any time during operation of the tank. Additionally, tank # 58 emissions are directed to a packed bed scrubber at 4300 actual cubic feet per minute and exhausting through stack ID 16.

- (d) One (1) polishing station, identified as PU-6B, consisting of twenty four (24) Hand Polisher Work Station Units for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift per work station unit, with each unit weighing approximately 0.524 pounds, and using cartridge dust collector for particulate control identified as Stack ID 6B and exhausting inside the building. This polishing station was installed in 1986.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

### **New Emission Units and Pollution Control Equipment**

There are no new emission units at this source during the review process.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with heat input equal to or less than 10 million British thermal units (Btu) per hour consisting of:
  - (1) Orr and Sembower natural gas fired boiler, identified as ID CU-1, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
  - (2) Dunham Bush natural gas fired boiler, identified as ID CU-2, with a maximum heat input rate of 5.0 million Btu per hour (constructed in 1986).
  - (3) One (1) natural gas fired cogeneration unit (generator/water heater), with a maximum heat input rate of 0.95 million Btu per hour (constructed in 2003).
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (c) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (d) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (e) Cleaners and solvents usage, of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months and characterized as follows:
  - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100F); or
  - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 degrees C (68F).
- (f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (g) Closed loop heating and cooling system.



- (h) Infrared cure equipment.
- (i) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (l) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (m) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (n) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.
- (o) On site fire and emergency response training approved by the department.
- (p) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (q) A laboratory as defined in 326 IAC 2-7-1(20)(C).
- (r) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour particulates and NOx, less than 25 pounds per day CO, or less than 3 pounds per hour VOC).
  - (1) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-6A, using cartridge dust collector for particulate control identified as Stack ID 6A and exhausting inside the building. This unit consists of:
    - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 240 units per eight hour shift per polishing unit, with each unit weighing approximately 0.524 pounds. Five (5) of the polishing units were installed in 1986 and one (1) remaining unit, at an exemption level, was installed in 1998.
    - (ii) One (1) Hand Polisher Work Station Unit for the correction of robotic polishing defects at a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.524 pounds. This unit was installed in 2002.
  - (2) One (1) polishing station for polishing miscellaneous metal parts, identified as PU-8, using cartridge dust collector for particulate control identified as Stack ID 8 and exhausting inside the building. This unit consists of:
    - (i) Six (6) Robotic Polishing units with a maximum capacity of each Polishing Unit of 240 units per eight hour shift per polishing unit, with

- each unit weighing approximately 0.524 pounds. Four (4) of the polishing units were installed in 1986 and two (2) remaining units, at an exemption level, were installed in 1998.
- (ii) One (1) Buffing Unit with a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.524 pounds. This unit was installed in 1986.
  - (3) One (1) Robotic Polishing Unit identified as ID PU-1 for polishing miscellaneous metal parts at a maximum capacity of 240 units per eight hour shift with each unit weighing approximately 0.309 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 1A and exhaust inside the building.
  - (4) One (1) Robotic Polishing Unit identified as ID PU-3 for polishing miscellaneous metal parts at a maximum capacity of 200 units per eight hour shift with each unit weighing approximately 1.749 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 3 and exhaust inside the building.
  - (5) One (1) Robotic Polishing Unit identified as ID PU-4 for polishing miscellaneous metal parts at a maximum capacity of 220 units per eight hour shift with each unit weighing approximately 0.95 pounds. Particulate emissions from this unit are controlled by a cartridge dust collector identified as stack ID 4 and exhaust inside the building.
  - (6) One (1) 500 gallon liquid caustic compound removal tank and one (1) 500 gallon de-ionized water rinse tank to facilitate the removal of powder coat paint (non VOC).
  - (7) Kolene Molten Salt Paint Stripping Bath for stripping paint racks, identified as ID CU-9. This unit is also equipped with natural gas fired burner system with maximum heat input rate of 1.8 million Btu per hour.
  - (8) Powder coating operation for coating miscellaneous metal parts, consisting of three (3) spray booths, identified as PB-1, PB-2 and PB-3, with a total maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by a dust collector exhausting inside the building. This operation is also equipped with one (1) natural gas fired dry off oven identified as ID CU-10 with a maximum heat input rate of 1.0 million Btu per hour and exhausting through stack ID 22; and two (2) powder coating natural gas fired cure ovens identified as ID CU-11 and CU-12 each with a maximum heat input rate of 2.5 million Btu per hour and each exhausting through stacks ID 23 and 24, respectively.
  - (9) Mullion powder coating of miscellaneous metal parts in one (1) powder coating spray booth identified as ID PB-14 with a maximum surface coating capacity of ten (10) pounds of powder coating per hour. Particulate emissions from this operation are controlled by cartridge dust collector and exhausting through stack ID PB-14. This operation is also equipped with one (1) natural gas fired cure oven identified as ID CU-7 with a maximum heat input rate of 0.8 million Btu per hour and exhausting through stack ID 14.

### Existing Approvals

The source has been operating under the following previous approvals:

- (a) FESOP 097-6983-00050, issued on June 23, 1998.
- (b) First Administrative Amendment 097-9993-00050, issued on August 31, 1998.

(c) Second Administrative Amendment 097-11169-00050, issued on February 28, 2000.

(d) Third Administrative Amendment 097-15633-00050, issued on April 9, 2002.

All conditions from previous approvals were incorporated into this FESOP except the following:

(a) FESOP 097-6983-00050, issued on June 23, 1998.

Conditions: D.3.4 (Visible Emissions Notations)  
D.3.5 (Cartridge Filter Inspections)  
D.3.6 (Cartridge Filter Failure Detection)

Reason not incorporated: It has been determined during this FESOP renewal process that the compliance monitoring conditions D.3.4, D.3.5 and D.3.6 are not applicable to Emission Units PU-6A, PU-6B, and PU-8 (Polishing stations), because each emission unit exhausts inside the building, is equipped with control device, and the 326 IAC 6-3-2 allowable emissions are less than 10 pounds per hour for each unit. Additionally, Emission Units PU-6A and PU-8 have been determined to qualify as insignificant activities with particulate emissions less than 5.0 lb/hr (i.e. uncontrolled potential to emit of 1.98 and 2.32 lb/hr, respectively).

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on September 26, 2002.

There was no notice of completeness letter mailed to the source.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (eight (8) pages).

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

| Pollutant | Unrestricted Potential Emissions<br>(tons/yr) |
|-----------|---|
| PM        | 80.38   |

|                 |       |
|-----------------|-------|
| PM-10           | 80.48 |
| SO <sub>2</sub> | 0.10  |
| VOC             | 68.09 |
| CO              | 7.20  |
| NO <sub>x</sub> | 8.60  |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

| HAP's                    | Unrestricted Potential Emissions<br>(tons/yr) |
|--------------------------|---|
| Total Chromium Compounds | 3.9 E-04                                      |
| Xylene                   | 28.9  |
| Formaldehyde             | 0.44  |
| Glycol Ethers            | 26.71   |
| Toluene                  | 8.12  |
| Caprolactam              | 0.35  |
| TOTAL                    | 64.52   |

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

### Potential to Emit After Issuance

The source, issued a FESOP on June 23, 1998, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F097-6983-00050; issued on June 23, 1998).

| Process/emission unit                  | Potential to Emit After Issuance<br>(tons/year) |       |                 |                       |      |                 |                              |
|--|---|-------|-----------------|-----------------------|------|-----------------|------------------------------|
|  | PM  | PM-10 | SO <sub>2</sub> | VOC                   | CO   | NO <sub>x</sub> | HAPs                         |
| F-Systems application booth (ID SL-01) | 0.5   | 0.5   | 0.00            | < 25.0 <sup>(1)</sup> | 0.00 | 0.00            | 9.0 (single)<br>24.0 (total) |
| Single Hoist Line (ID SHL-5)           | negl.   | negl. | 0.00            | 0.00                  | 0.00 | 0.00            | 3.87 E-04<br>(single)        |
| Dual Hoist Line (ID DHL-13)            | negl.   | negl. | 0.00            | 0.00                  | 0.00 | 0.00            | 3.87 E-04<br>(single)        |

|  |      |      |      |       |      |      |                               |
|--|------|------|------|-------|------|------|-------------------------------|
| Significant Hand Polishing Operation (ID PU-6B)                          | 0.35 | 0.35 | 0.00 | 0.00  | 0.00 | 0.00 | 0.00                          |
| Insignificant Robotic Polishing Units (PU-1, PU-3, PU-4, PU-6A and PU-8) | 0.33 | 0.33 | 0.00 | 0.00  | 0.00 | 0.00 | 0.00                          |
| Insignificant Activities <sup>(2)</sup>                                  | 0.24 | 0.74 | 0.10 | 1.29  | 7.20 | 8.60 | 0.35 (single)<br>0.50 (total) |
| Total PTE After Issuance   | 1.42 | 1.82 | 0.10 | 26.29 | 7.20 | 8.60 | < 10 (single)<br>< 25 (total) |

Notes:

1) Reflects limited potential emissions from spray paint booth A3 to make the requirements of 326 IAC 8-1-6 (BACT) not applicable.

2) Insignificant activities consist of natural gas combustion units (CU-1, CU-2, CU-7, CU-9, CU-10, CU-11 and CU-12) and powder coating booths (PB-01, PB-02, PB-03 and PB-14).

### County Attainment Status

The source is located in Marion County.

| Pollutant       | Status         |
|-----------------|----------------|
| PM-10           | attainment     |
| SO <sub>2</sub> | maintenance    |
| NO <sub>2</sub> | attainment     |
| Ozone           | maintenance    |
| CO              | attainment     |
| Lead            | unclassifiable |

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

### Federal Rule Applicability

There are no new federal rules applicable to the source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for the original FESOP F097-6983-00050, issued on June 23, 1998.

- (a) Two (2) boilers (ID CU-1 and CU-2) each constructed in 1986 and rated at 5.0 MMBtu per hour are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because each boiler's capacity is less than the rule applicability threshold of 10 MMBtu per hour.
- (b) Single Hoist Line (SHL-5; Tank # 20) and Dual Hoist Line (DHL-13; Tank # 58) are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:
  - (1) The surface tension of the chromium electroplating bath contained with the tanks ID # 20 and #58, shall not exceed forty-five (45) dynes per centimeter at any time during the operation of the tank if a chemical fume suppressant

containing a wetting agent is used to demonstrate compliance.

- (2) Each time that surface tension monitoring exceeds forty-five (45) dynes per centimeter, the frequency of monitoring must revert back to every four (4) hours of tank operation. After forty (40) hours of monitoring tank operation every four (4) hours with no exceedances, surface tension measurement may be conducted once every eight (8) hours of tank operation. Once there have been no exceedances during forty (40) hours of tank operation, surface tension measurement may be conducted once every forty (40) hours of tank operation on an ongoing basis, until an exceedance occurs.
- (3) An alternative emission limit of 0.01 milligram per day standard cubic meter (mg/dscm) will be applicable if the chromium electroplating bath does not meet the limit above.
- (4) A summary report shall be prepared to document the ongoing compliance status of the chromium electroplating operation. This report shall be completed annually, retained on site, and made available to IDEM and OES upon request. If there are significant exceedance of chromium air emission limits (as defined in 40 CFR Part 63.347(h)(2)), then semiannual reports shall be submitted to:

Indiana Department of Environmental Management  
Air Compliance Branch, Office of Air Quality  
Chromium Electroplating  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

- (5) The chromium electroplating operations shall be subject to the record keeping and reporting requirement as indicated in the chromium electroplating NESHAP.

Both Chromium electroplating tanks #20 and #58 are controlled by a chemical wetting agent with surface tension of the tank bath not exceeding 45 dynes per centimeter at any time during operation of the tank. Additionally, both tanks (#20 and #58) are directed to a packed bed scrubber. However, the scrubber does not need to be operated at all times but may be operated at the Permittee's discretion as permitted in the original FESOP 097-6983-00050, issued on June 23, 1998.

- (c) The parts degreasing operation that includes parts washing solvent with usage less than 145 gallons, as an insignificant activity, is not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 20, (40 CFR 63, Subpart T). Subpart T applies to degreasing operations using one of six listed halogenated solvents, or any combination of the solvents in a concentration greater than 5 percent by weight, as a cleaning or drying agent. The source uses parts washing solvent which contains

halogenated solvents in a concentrations less than 5 percent by weight (maximum of 1%); therefore, Subpart T does not apply.

- (d) Although the source includes units that belong to a source category affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002, (i.e., boilers CU-1 and CU-2), the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable because the source has a limited potential to emit of less than 10 tons per year of a single HAP and less than 25 tons per year of the combination of HAPs.
- (e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Generally, such requirements apply to a Part 70 source that involves a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, that meets the following criteria:
  - (1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,
  - (2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and
  - (3) the unit has a potential to emit before controls equal to or greater than the applicable Part 70 major source threshold for the regulated pollutant.

As a FESOP source, this source has accepted federally enforceable limits such that the requirements of 326 IAC 2-7 (Part 70) do not apply. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

#### **State Rule Applicability - Entire Source**

There are no new state rules applicable to the source during this FESOP review process. The applicability determination that follows is based on that conducted for original FESOP F097-6983-00050, issued on June 23, 1998.

#### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

Pursuant to 326 IAC 2-8-4(9), the source is required to maintain a Preventive Maintenance Plan (PMP) on site. Pursuant to 326 IAC 2-8-3(c)(6)(FESOP: Permit Application), the source is not required to submit the plan. However, the PMP maintained on site must meet the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan). The previous FESOP issued to this source, F097-6983-00050, had the requirement included in Condition B.13 and is being carried over to this renewal.

#### **326 IAC 2-2 (Prevention of Significant Deterioration, PSD)**

Pursuant to 326 IAC 2-2 and 40 CFR 52.21 (PSD), this source, constructed in 1986 after the rule applicability date of August 7, 1977, is still not considered a major source because it has the potential to emit less than 250 tons per year of any criteria pollutant and it is not one of the 28 listed source categories. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, do not apply.

#### **326 IAC 2-4.1-1 (New Source Toxics Control)**

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25

tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because it will limit source-wide single HAP emissions to less than 10 tons per year and total HAP emissions to less than 25 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source is located in Marion County and it has the potential to emit more than ten (10) tons per year of VOCs. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received by April 15 of each year, in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

326 IAC 5-1 (Opacity Limitations)

The Source is located in a specified portion of Marion County. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (b) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-2 (Particulate Emission Limitations)

This source is not subject to the requirements of 326 IAC 6-1-2 because the potential particulate emissions are less than 100 tons per year and actual particulate emissions are less than 10 tons per year.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is not subject to 326 IAC 6-5, for fugitive particulate matter emissions, because the fugitive particulate matter emissions from this source are less than 25 tons per year.

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the source shall comply as follows:

- (a) The total usage of any single hazardous air pollutant (HAP) at F-Systems custom built solid lubricant application booth (SL-01), including HAP usage for clean-up, shall be less than 9.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.
- (b) The total usage of the combined HAPs at F-Systems custom built solid lubricant



application booth (SL-01), including combined HAP usage for clean-up, shall be less than 24 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this condition shall limit the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

### State Rule Applicability - Individual Facilities

There are no new state rules determined as applicable to individual facilities at this source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for the original FESOP F097-6983-00050, issued on June 23, 1998.

#### 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The two (2) natural gas fired boiler (ID Nos. CU-1 and CU-2; each constructed in 1990), each with a maximum heat input capacity rating of 5.0 MMBtu per hour, are subject to the particulate matter limitations of 326 IAC 6-2-4. Pursuant to this rule, particulate emissions from indirect heating facilities constructed after September 21, 1983, shall be limited by the following equation:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input  
Q = total source maximum operation capacity rating = 10.0 MMBtu/hr

$$Pt = 1.09/10.0^{0.26} = 0.60 \text{ lbs PM/MMBtu}$$

#### 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)

- (a) The particulate emitted from the six (6) polishing operations, identified as PU-6B and PU-8, shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

| Emission Unit                                     | Process Weight Rate (lb/hr) | Uncontrolled Particulate Emissions (lb/hr) | Controlled Particulate Emissions (lb/hr) <sup>(1)</sup> | Allowable Particulate Emissions (326 IAC 6-3-2) (lb/hr) |
|---|-----------------------------|--|---|---|
| Hand Polishing Operation (ID PU-6B)               | 377.3                       | 7.94                                       | 0.0794  | 1.34  |
| Robotic Polishing Unit and Buffing Unit (ID PU-8) | 110.04                      | 2.32                                       | 0.0232  | 0.58  |

(1) Particulate emissions are controlled by a dust collector with 99% control efficiency.

The dust collectors shall be in operation at all times the emission units PU-6B and PU-8 are in operation, in order to comply with this limit.

- (b) Pursuant to 40 CFR 52, Subpart P, the particulate matter emissions from the surface coating facility (ID SL-01) shall not exceed the pound per hour emission rate established

as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating facility (ID SL-01) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

- (c) Pursuant to 326 IAC 6-3-2(e), the allowable particulate emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. This includes the following equipment listed under insignificant activities (each is limited to particulate emissions of 0.551 pounds per hour):
- (1) Robotic Polishing units PU-6A, PU-1, PU-3 and PU-4.
  - (2) Powder coating operation consisting of 4 coating booths identified as PB-1, PB-2, PB-3 and PB-14.
  - (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (4) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

#### 326 IAC 8-2-9 (Miscellaneous Metal Coating)

This rule applies to facilities located anywhere in the state that were constructed after July 1, 1990, which have actual volatile organic compound (VOC) emissions of greater than fifteen (15) pounds per day before add-on controls, and which are not otherwise regulated by another provision of Article 8.

The F-Systems custom built solid lubricant application booth (ID SL-01) was constructed in 1998 and has actual VOC emissions greater than fifteen (15) pounds per day. The source has opted to limit actual VOC emissions from the F-Systems custom built solid lubricant application booth (ID SL-01) to less than fifteen (15) pounds per day. Therefore, rule 326 IAC 8-2-9 is not applicable to the F-Systems custom built solid lubricant application booth (ID SL-01). The source shall maintain records of daily coating material usage to demonstrate compliance with this limitation.

#### 326 IAC 8-3-2 (Cold Cleaner Operations)

The source, which is located in Marion County, maintains a cold cleaning parts washer with capacity of less than 145 gallons (i.e., insignificant activities) is subject to the applicable rule requirements since the facility was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall ensure that the following requirements

are met for the degreasing operation:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

**326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)**

The requirements of this rule apply to cold cleaning degreasers without remote solvent reservoir that either existed as of July 1, 1990 and was located in a specified county, or the cleaning facility was constructed after July 1, 1990 and was located in anywhere in the state. This source, located in Marion County which is a listed county, is not subject to the applicable rule requirements since the degreaser has a remote solvent reservoir.

**326 IAC 8-6 (Organic Solvent Emission Limitations)**

This rule applies to sources existing as of January 1, 1980, located in Lake and Marion Counties, as well as to facilities commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This source is located in Marion County and, has potential emissions of VOC less than 100 tons per year. Therefore, this rule does not apply to this source.

**Testing Requirements**

Compliance testing is not required for the coating operation since the coating material usage at coating operation (ID SL-01; SV 25) and related VOC and volatile organic HAP emissions assume an emission factor of 2,000 pounds of pollutant emitted per ton of pollutant input to the coating operation.

Testing is also not required for the powder coating operations (PB-1, PB-2, and PB-3), and polishing units (PU-6A, PU-6B, PU-6B, PU-1, PU-3 and PU-4) since all exhaust inside the building and are controlled by dust collectors with emissions after control well below the allowable particulate emission rate. Powder coating booth PB-14, while exhausting outside the building, is also equipped with the dust collector with emissions after control well below the allowable particulate emission rate, and therefore is not subject to stack testing.

Decorative chromium electroplating operations (IDs SHL-5 and DHL-13) are not required to perform a compliance test for chromium emissions according to 40 CFR 63.343 (b)(2) as long as the operation complies with the applicable surface tension limit of 40 CFR 63.342(d)(2). The source is required to show compliance with the chromium NESHAP through continuous monitoring of surface tension.

## Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, and OES, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The one (1) F-Systems custom built solid lubricant application booth (ID SL-01) has applicable compliance monitoring conditions as specified below:
  - (a) Inspections shall be performed once per shift to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (SV25) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the spray paint booth must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-8 (FESOP).

2. The two (2) chromium electroplating operations, Single Hoist Line (SHL-5; Tank # 20)

and Dual Hoist Line (DHL-13; Tank # 58) controlled by chemical wetting agent have applicable compliance monitoring conditions as specified below:

- (a) The Permittee shall monitor the surface tension of the electroplating bath during tank operation according to the following schedule:
  - (i) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of this part.
  - (ii) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.
  - (iii) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (ii) above. For example, if a Permittee had been monitoring a tank once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.
- (b) Once a bath solution is drained from tanks 20 and 58 and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures in paragraphs (a)(ii) and (a)(iii) above.

These monitoring conditions are necessary to ensure compliance with 40 CFR Part 63 Subpart N and 326 IAC 20-8.

## Conclusion

The operation of this miscellaneous metal parts surface coating, decorative chromium electroplating, metal trimming and stamping of architectural hardware products source shall be subject to the conditions of the attached proposed FESOP No.: F097-16154-00050.

# Appendix A: Emissions Calculations

Page 1 of 3 ATSD App A

## Natural Gas Combustion Only

MM BTU/HR <100

## Small Industrial Boiler

Company Name: IR Von Duprin

Address City IN Zip: 2720 Tobey Drive, Indianapolis, Indiana

Permit No.: F097-16154-00050

Reviewer: AY/EVP

Date: September 2, 2003

| Unit                                   | Heat Input Capacity<br>MMBtu/hr | Potential Throughput<br>MMCF/yr |           |                      |      |      |
|--|---------------------------------|---------------------------------|-----------|----------------------|------|------|
| One (1) natural gas fired microturbine | 0.95                            |                                 |           |                      |      |      |
|  | 0.9485                          | 8.3                             |           |                      |      |      |
|  |                                 |                                 | Pollutant |                      |      |      |
| Emission Factor in lb/MMCF             | PM*                             | PM10*                           | SO2       | NOx                  | VOC  | CO   |
|  | 1.9                             | 7.6                             | 0.6       | 100.0<br>**see below | 5.5  | 84.0 |
| Potential Emission in tons/yr          | 0.01                            | 0.03                            | 0.00      | 0.42                 | 0.02 | 0.35 |

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

## Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

Page 2 of 3 ATSD App A

**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: IR Von Duprin****Address City IN Zip: 2720 Tobey Drive, Indianapolis, Indiana****Permit No.: F097-16154-00050****Reviewer: AY/EVP****Date: September 2, 2003****HAPs - Organics**

|                               |                    |                            |                         |                   |                    |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf    | Benzene<br>2.1E-03 | Dichlorobenzene<br>1.2E-03 | Formaldehyde<br>7.5E-02 | Hexane<br>1.8E+00 | Toluene<br>3.4E-03 |
| Potential Emission in tons/yr | 8.724E-06          | 4.985E-06                  | 3.116E-04               | 7.478E-03         | 1.413E-05          |

**HAPs - Metals**

|                               |                 |                    |                     |                      |                   |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf    | Lead<br>5.0E-04 | Cadmium<br>1.1E-03 | Chromium<br>1.4E-03 | Manganese<br>3.8E-04 | Nickel<br>2.1E-03 |
| Potential Emission in tons/yr | 2.077E-06       | 4.570E-06          | 5.816E-06           | 1.579E-06            | 8.724E-06         |

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations**  
**Polishing Units**

Page 3 of 3 ATSD App A

**Company Name:** IR Von Duprin  
**Address City IN Zip:** 2720 Tobey Drive, Indianapolis, Indiana  
**Permit No.:** F097-16154-00050  
**Reviewer:** AY/EVP  
**Date:** September 2, 2003

Polishing Unit (PU 6B) (vents indoor)

28 robotic polishing units  
8 hour shift capacity of each Robotic polishig Unit  
240 units weighing  
0.524 pounds per unit

Controlled by Torit Baghouse 6B

23270 pounds dust (4) collected in 1920 operating hours  
99.00% baghouse efficiency

Combined Maximum process rate for units 6A, 6B and 8(lb/hr) 644.52  
Maximum process rate for unit 6B 440.16

|                                  |        | Uncontrolled Emissions |        | Controlled Emissions |        |
|----------------------------------|--------|------------------------|--------|----------------------|--------|
|                                  |        | lb/hr                  | ton/yr | lb/hr                | ton/yr |
| PM/PM10 emission factor (lb/ton) | 37.989 | 8.36                   | 36.62  | 0.084                | 0.366  |
| VOC emission factor (%)          | 0.00   | 0.00                   | 0.00   | 0.00                 | 0.00   |

(4) Polising unit ID 6A, 6B, and 8 have total process rate of 581.66 pounds per hour & a total for all 3 baghouses collected was 23270 pounds  
PM/PM10 emission factor (lb/ton) = 23270 lbs (dust collected) /0.99 (baghouse efficiency) / (581.66 lb/hr x 1920 actual operating hours) / 2000 (lb/ton)